

CLAIMS:

1. An optical recording medium comprising at least one recording layer containing as a primary component an alloy containing at least two elements selected from the group consisting of Fe, Al and Si.

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2. An optical recording medium in accordance with Claim 1, wherein the alloy contained in the at least one recording layer as a primary component has a composition $[x_1, y_1, z_1]$ in terms of the ternary composition diagram that falls within a region of a pentagon defined by straight lines connecting points $[57, 43, 0]$, $[0, 55, 45]$, $[15, 0, 85]$, $[89, 11, 0]$ and $[0, 16, 84]$ in the ternary composition diagram.

3. An optical recording medium in accordance with Claim 1, which further comprises a dielectric layer on at least one side of the at least one recording layer.

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4. An optical recording medium in accordance with Claim 2, which further comprises a dielectric layer on at least one side of the at least one recording layer.

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5. An optical recording medium in accordance with Claim 1, which further comprises dielectric layers on opposite sides of the at least one recording layer.

6. An optical recording medium in accordance with Claim 2, which further comprises dielectric layers on opposite sides of the at least one recording layer.

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7. A method for manufacturing an optical recording medium comprising of a step of forming at least one recording layer of an optical recording medium by a sputtering process using a target that contains as
5 a primary component an alloy containing at least two elements selected from the group consisting of Fe, Al and Si, the alloy contained therein as a primary component having a composition $[x_2, y_2, z_2]$ in terms of a ternary composition diagram in which x_2 , y_2 and z_2 represent atomic ratios (atomic %) of Fe, Al and Si. and each of x_2 , y_2 and z_2 is defined to fall
10 within a region of a pentagon defined by straight lines connecting a point A' [55, 45, 0], a point B' [0, 50, 50], a point C' [9, 0, 91], a point D' [87, 13, 0] and a point E [0, 10, 90] in the ternary composition diagram.

8. A target used for a sputtering process that contains as a primary
15 component an alloy containing at least two elements selected from the group consisting of Fe, Al and Si, the alloy contained therein as a primary component having a composition $[x_2, y_2, z_2]$ in terms of a ternary composition diagram in which x_2 , y_2 and z_2 represent atomic ratios (atomic %) of Fe, Al and Si. and each of x_2 , y_2 and z_2 is defined to fall
20 within a region of a pentagon defined by straight lines connecting a point A' [55, 45, 0], a point B' [0, 50, 50], a point C' [9, 0, 91], a point D' [87, 13, 0] and a point E [0, 10, 90] in the ternary composition diagram.